

# TOWN OF HANOVER BOARD OF HEALTH HANOVER, MA 02339

# HANOVER WELL REGULATIONS

### **PART I GENERAL**

#### 1.1 PURPOSE

The purpose of this regulation is to insure the proper location and maintenance of Wells in order to protect the health and welfare of the residents of the Town of Hanover. All private wells are subject to the approval of the Board of Health. Each application for a private water well must be accompanied by a fee of \$50.00. Checks shall be made payable to the Town of Hanover and submitted to the Board of Health with the completed application forms.

### **1.2 AUTHORITY**

In accordance with M.G.L. Ch. 111 s.31, the State Sanitary Code-Chapter 11-The Minimum standards of Human Habitation, Ch 40 s.54, and any other powers thereto enabling, the Hanover Board of Health adopted the following Regulations for Private Wells at its regularly scheduled meeting on September 23, 1991.

#### 1.3 DEFINITIONS

ABANDONED WELL – The discontinuance or nonuse of a private drinking water well as a water supply with the intent to abandon for a period of one year or more.

BOARD - Board of Health of the Town of Hanover, Massachusetts

COMPLETED APPLICATION - For the purpose of this regulation "completed application" means an application containing information satisfactory to the Board regarding the engineered plans, site inspections, testing requirements, final decisions or variances, and any other information required by any part of these regulations.

DRYWELL – A see page (leeching) pits, with or without stones around it used to leach storm water runoff from the roof drains.

DWELLING – a privately or publicly owned, permanently fixed structure containing a dwelling unit or dwelling units.

IRRIGATION WELLS – Wells used for the sole purpose of watering or irrigation. These shall not be connected at any point in time to a dwelling or a building unless they meet the requirements of a private Drinking Water Well and have Board's written permission.

LOT – An area or parcel of land in common ownership, designated by its owner or owners as a separate lot on a plan filed with the Town of Hanover and the Plymouth County Registry of Deeds, used or available for use, as the site of one or more buildings.

PORTABLE WATER SUPPLY – A water supply of sufficient quantity and pressure to meet the needs of the occupants of the dwelling, lot or building, connected with a public water supply or with any other source that the Board or agent has determined, by requiring the water to be tested, does not endanger the health of any potential user and is fit for human consumption.

PRIVATE DRINKING WATER WELL – Any well supplying water for human consumption. Any pit, pipe, excavation, shaft spring casing, hole or other source of water to be used for any purpose of supplying water to be used as a potable drinking water supply.

RIGHT (S) OF WAY (ROW) – For the purpose of this regulation shall refer to any roadway, or thoroughfare on which public passage is made and any corridor of land over which facilities such as railroads, pipelines, powerlines, conduit, channel or communication lines are located.

SUBSURFACE DRAIN – Any underground conduit used for the conveyance of water, including curtains drains.

WELL DRILLERS – Any person, association, partnership, company, corporation or trust that constructs a private well, who is licensed by the Water Resource Commission, established in CH. 620 or the Acts of 1956.

#### 1.4 NOTICE OF INTENT

No work shall commence on a proposed private will until a written Notice of Intent Is filed with the Hanover Board of Health. Receipt of the notice does not constitute approval, in any way, of the private water well.

### 1.5 APPLICATION

Prior to any private Drinking Water well being approved as a potable drinking water source or an abandoned well being placed into service in the Town of Hanover, an application must be filed with the Hanover Board of Health. This shall be done on a form provided by the Board. (A non-refundable application fee will be charged to the applicant.)

Submission of an engineered plan prepared by an registered engineer (for potable well supply) or environmental consultant trained and experienced in water supply or a well driller (for non-potable supply) shall be submitted with the application for the private water supply. This plan shall include, but not be limited to a scaled drawing showing location of the proposed or present well on the lot, all septic systems, sewers, drywells, water lines, lot lines, roads, underground and surface storage tanks, surface and subsurface drains, buildings present or proposed, golf courses, agricultural lands or any other pertinent information within a 200 foot distance or commercial storage tanks, stockpiles or landfills within 400 feet.

If the plan is for a Private Drinking Water Well, the plan shall also be submitted to the Department of Public Works and the Conservation Commission for their comments. Comments are to be submitted to the Board of Health within 14 business days of receipt of the plan if they are to be considered.

An application is considered filed on the date upon which it is presented by the applicant or their agent to the Board's agent (office). Incomplete applications will not be accepted for filing by the Board or the agent.

### 1.6 REGISTRATION IS REQUIRED OF ALL WELL DRILLERS

No person shall engage in the business of construction or repair of private water Wells or irrigation wells within the Town of Hanover unless they or it are registered with the water Resources Commission, Division of water Resources, as required by the Well Drillers Registration Act, MGL Ch.21s16. Proof of such registration must be submitted to the Hanover Board of Health when the Notice of Intent is filed and must also be recorded on the well driller's report. Approval for Private Water Well will not be issued unless the proposed well driller is registered.

### 1.7 WELL DRILLER'S REPORT

Within 30 days after the completion of a productive Private Drinking Water Well Or a irrigation well, a well driller shall send a carbon copy of the well driller's report to the Hanover Board of Health. This report must be received prior to approval and shall include the well driller's current registration number.

### **PART II**

### APPROVAL STEPS FOR NEW PRIVATE DRINKING WATER WELLS

- 2.1 A registered engineer, environmental consultant trained and experienced in water supply, or well driller shall be hired by the applicant for Private Drinking Water Well. A site examination shall be conducted by the engineer, consultant, or the well driller. After the site inspection, the engineer/consultant/well driller shall determine the following and submit the data to the Board for their review.
- a. Direction and rate (feet/day) of groundwater flow which may be determined by two upgradient and at least one downgradient monitoring wells or other Board approved means.
- b. A minimum of a four hour pumping test is required. There shall be a minimum of 150 gallons per bedroom per day at 20 pounds per square inch at the highest fixture as demonstrated by the four hour pump test. Less yields per minute may be allowed if adequate storage capacity, acceptable to the Board is provided.

c. The elliptical protection zones shall be delineated and shown on the engineered plan if deemed necessary by the board. All cost of developing and presenting the foregoing data will be borne by the applicant.

#### 2.2 INSTALLATION OF THE PRIVATE DRINKING WATER WELL.

The Private Drinking Water Well Shall be installed by a registered well driller Who should take into consideration the method detailed in the Environmental Protection Agency's MANUAL OF WATER WELL CONSTRUCTION PRACTICES, Department of Environmental Protection's PRIVATE WELL GUIDELINES, and any other applicable State, Federal or local regulations or requirements regarding well installation. Homeowners can install their own well with written approval from the Board of Health.

The Private Drinking Water Well must be curbed and covered to prevent entrance of contamination and divert surface drainage.

2.3 There shall be a separate Private Drinking Water Well for each dwelling. The well serving the dwelling shall be located within the lot boundaries of the lot. No Private Drinking Water Well shall be used to supply more than one dwelling.

### Part III

### 3.1 LOCATION OF WELL WITH RESPECT TO POTENTIAL CONTAMINANTS.

In establishing the location of a Private Drinking Water Well, the plan Submitted shall show potential sources of contamination listed below and in sl.5 which exists on or adjacent to the site. All Private Drinking Water Wells shall be located the required distances from potential sources of pollution unless the applicant demonstrates by clear and convincing evidence, and the Board finds, that the installation of the Private drinking Water Well closer than 200 feet to leaching facility or reserve area will not adversely affect the health and/or safety of the occupants of any proposed or existing residence. In no case shall a variance for new construction be granted to allow the Private Drinking Water Well to be located less than 100 feet from the leaching facility or reserve area.

Distances shall be measured from the top of the well which is seen above the ground (the cap or seal), or in the case of a well below the ground, the distance shall be measured from the area directly over the well at ground level to the closest edge of the potential pollution source.

In establishing the location of a well, the following distances shall be the minimum allowed:

Source Minimum Lateral Distances

### **Septic System**

Leaching area - 100 feet Reserve area - 100 feet Septic tank - 50 feet Sewer lines - 50 feet

#### Paved areas

Driveways - 15 feet Street/Highway - 25 feet

Buildings - 50 feet Barns, Stables Corrals - 10 feet Property line - 10 feet Right of Way - 100 feet

Private Drinking Water Wells located within 100 feet of a Right of Way shall be marked in accordance with 333 CMR 11.04:2(C).

### PART IV TESTING REQUIREMENTS

- 4.1 All chemical and bacteriological testing will be performed by a State Certified Laboratory with current State Certification Status in the tests they are performing in order to be accepted as valid results by the Board. Water Samples will be taken by the laboratory personnel acceptable to the Board. A copy of the completed test results shall be forwarded to the Board of Health for review. Water samples to be analyzed prior to the installation of water treatment devices.
- 4.2 The following test are required for a Private Drinking Water Well to be approved by the Board or Agent as a potable water supply:

Alkalinity Color Manganese PH Ammonia Copper Nitrate Sodium Arsenic Hardness Nitrite Taste Chloride Iron Odor Turbidity Coliform(Total) Fecal Coliform Standard Plate Count Lead Sulfate

Other tests that may be required at the discretion of the Board, or warranted by the location such as volatile organics, other organic chemicals, radionuclides, pesticides, and herbicides.

- 4.3 The cost of all water testing will be borne by the applicant.
- 4.4 Failure to meet the current drinking water standards in the parameters tested may constitute a reason for disapproval of the Private Drinking Water Well.
- 4.5 After the well is approved and installed it must be tested every five years by either the homeowner or the landlord. A copy of the inspection report must be submitted to the Board of Health. The water must be tested for all of the items listed in section 4.2 of this regulation. If a well is abandoned or not used for a period of more than one year it must be tested before use can continue.

### PART V APPROVAL OF A NEW PRIVATE WATER SUPPLY

5.1 All Wells shall be approved by the Board of Health. Site inspection by the Board's Agent, shall be made, prior to approval by the Board. Board of Health approval will not be given until all State, Federal and local approvals are demonstrated in writing. Final approval by the Board of Health shall be given in writing. No oral approvals shall be issued with respect to any structure served by a Private Drinking Water Well until the Board has certified that the well is properly installed and operational.

#### 5.2 DISAPPROVAL

Written notice of Disapproval shall be given to the applicant which shall state the reasons for disapproval.

5.3 A final decision of the disapproval or approval shall be rendered by the Board of Health or agent within 30 days after the receipt of the all pertinent information required.

## PART VI VARIANCE

- 6.1 The Board may, after a public hearing, grant a variance when, in its opinion, the enforcement thereof would do manifest injustice. If a variance is requested from any portion of these regulations the applicant must demonstrate to the Board by clear and convincing evidence that there will be no adverse effect on the public health and safety or the environment if the variance is granted.
- 6.2 The request for the variance shall be made in writing and shall state the specific variance sought and the reasons therefore. Notice of the hearing shall be given by the Board, at the applicant's expense, at least ten (10) days prior thereto, by certified mail to all abutters of the property upon which the private well is located and by publication in a newspaper of general circulation in the town or city in which the private well is located.

6.3 Any grant or denial of variance shall be in writing and shall contain a brief statement of the variance sought and the reasons therefor. Any variance may be subject to such qualification, revocation, suspension, condition, or expiration as is provided in these regulations or as the Board expresses in its grant of the variance.

#### PART VII IRRIGATION WELLS

- 7.1 Irrigation wells are for the sole purpose of irrigation and shall not be deemed or used as a potable water supply for human consumption.
- 7.2 Irrigation wells shall not be connected to any dwelling unless they are approved as a Private drinking Water Well by the Board. There shall be no possibility of a cross-connection with a drinking water supply line due to the location of the line from the non-potable well. Each outlet should be valved with a removable handle. The handle should be removed except when the valve is in use and the outlet should be appropriately signed to the effect that any water from that outlet is not safe to drink.
- 7.3 A plan must be submitted showing all structures referenced in section 1.5 and the following distances are to followed:

Source Minimum Lateral Distances

### **Septic System**

Leaching area 50 feet Septic tank and sewer line 25 feet

### **Property Line**

25 feet

The well driller should be cognizant of the distance requirements in section 3.1 of these regulations and adhere to them.

It is suggested that irrigation wells be tested periodically for fecal and total coliform, and heavy metals.

7.4 All irrigation wells shall be posted with a placard stating "Irrigation Well(s) Not a Drinking Water Supply".

### PART VIII DECOMMISSION REQUIREMNTS

Abandoned wells, test holes, and borings shall be decommissioned so as to prevent the well from being a channel allowing vertical movement of water.

- 8.1 The owner of the private well shall decommission the well if the well meets any of the following criteria:
- a) construction of the well is terminated prior to completion of the well
- b) the use of the well is to be permanently discontinued
- c) the well has, after extended use, been out of service for at least three years
- d)The well is a potential hazard to public health or safety and the situation cannot be corrected.
- e) the well has the potential for transmitting contaminants from the land surface into an aquifer or from one aquifer to another and the situation cannot be corrected.
- 8.2 Decommissioning will be done according to the guidelines outlined in Department of Environmental Protection's PRIVATE WELL GUIDELINES.

#### PART IX APPEAL

Any person aggrieved by the final decision of the Board may seek relief therefrom within thirty days(30) in any court of competent jurisdiction, as provided by the laws if this Commonwealth.

<u>PART X PENALTIES</u> Any person who shall violate any provision of these regulations, for which a penalty is not otherwise provided in any of the Massachusetts General Laws or in any other provision of these regulations, shall upon

conviction be fined not less than \$25 not more than \$500. Each day of failure to comply with an order shall constitute a separate violation.

### PART XI RESPONSIBILITY

11.1 The maintenance of a Private Drinking Water Well or an irrigation well is the homeowner's responsibility. The Hanover Board of Health will enforce these regulations within the scope of its authority. However the responsibility of future monitoring, maintenance, testing and treating and decommissioning remains with the homeowner. Note: M.G.L. Chapter 21E and the Solid Waste Acts of 1987 require that liable parties compensate affected well owners for the costs of mitigating contamination.

11.2 The issuance of a well permit shall not be construed as a guarantee by the Board that the water system will function satisfactorily nor that the water supply will be of sufficient quality or quantity for its intended use.

#### PART XII EXPERT CONSULTANTS

The applicant shall agree in writing to pay the costs and expense of any mutually agreed upon expert consultant deemed necessary by the Board to review applications, plans, or test results, etc.

#### **PART XIII FEES**

A non-refundable fee will be charged when the completed application forms is submitted. In addition, if the Board or its agent must reinspect the well, a separate fee will be charged for each re-inspection. See current fee schedule.

### PART XIII SEVERABILITY

If any provision of this regulation is declared invalid by a court of competent jurisdiction, such invalidity shall not affect any remaining provisions of this regulation. Any part of these regulations subsequently invalidated by a new sate law or modification of an existing amended law shall automatically be brought into conformity with new or amended law and shall be deemed to be effective immediately, without recourse to a public hearing and customary procedures for amendment or repeal of such regulation.

### **PART XIV ADOPTION:**

The above regulation (including therein the Title thereof) pursuant to all powers and authority of the board, is unanimously approved on December 16, 2008 and to be effective January 1, 2009.

TOWN OF HANOVER BOARD OF HEALTH